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ABSTRACT

The specific objectives of this study were to examine: (1) social background factors which may be related to educational congruence; (2) the relationship between educational congruence and occupational congruence; (3) educational and occupational congruence as it related to occupational satisfaction; and (4) educational and occupational congruence as it related to educational satisfaction. Data were obtained from a longitudinal study of of 143 high school seniors from 8 rural high schools in Hamilton County and Story City, Iowa. The present thesis utilized data from an original study completed in 1948 and a follow-up study in 1967. Past research in occupational career decision-making was utilized to formulate a theoretical approach to examine the relationship between educational congruence and social background factors; the extent to which educational congruence functions in the service of occupational congruence; and the relationship of educational congruence to occupational congruence as it affects far-reaching outcomes of educational and occupational satisfaction. Two generalizations about education's relationship to occupation were tentatively submitted: (1) society has placed too much faith in the specific contribution of formal education to occupational competence; and (2) post high school education has not made the knowledge it imparts useful to students who seek both occupational and personal satisfaction. (KM)

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Relationship of educational congruence to the occupational attainment process and subsequent satisfaction: A longitudinal study

by

Carol Jean Bull

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INTRODUCTION

Our society places a high value on education and gives ample evidence of this fact. The $38.2 billion of 1966-67 government expenditure for education amounted to 6.6 per cent of the gross national products (Simon and Grant, 1967). Nongovernment institutions and individuals expended an additional $10.6 billion for education in 1966-67, not including the time diverted from alternative uses and spent by students in the classroom (Simon and Grant, 1967).

The value of education can be divided into two component parts (Schultz, 1963). One is a productive component in which the student prepares himself for a higher level occupation. The other is a consumptive component which provides a satisfaction from learning and from an increasing contribution to the welfare of society.

Little more than a generation ago, a high school education was adequate entry into most occupations other than those with professional stature. Increasingly, education beyond high school is becoming a formal requirement for entry into many occupations, and the level of occupation is to a large extent determined by the quality and quantity of education attained.

Occupational levels are usually differentiated by a dimension of prestige within the occupational structure. Al-

though the hierarchy of occupational prestige tends to remain quite stable over time throughout society, there is a general rise in the occupational hierarchy as a whole. Occupational opportunities generated by our technological society appear to be those requiring higher skills and more training while those made obsolete appear to concentrate among the lower prestige occupations with minimal entry requirements. Many of the remaining lower level occupations also are becoming more specialized in efforts to be more responsive to the needs of society (Haller, 1969). Increasingly, individuals are perceiving these forces and seeking additional education beyond high school.

Students also seek personal satisfactions from attainment of additional education. Dole's study (1964) showed that the foremost and highly constant reason why students elect to continue schooling is for the value of satisfaction. The function of education for society and for the individual is related since the individual with greater personal satisfaction is likely to be a better adjusted member of social groups and more productive or creative in his occupation. Thus, those of today's youth who have less educational opportunity are likely to be disadvantaged both in the development of their occupational talents and in their personal satisfaction.

Data from the Iowa Department of Public Instruction indi-

cated that rural youth have access to fewer course units in high school than urban youth. The report concluded: "It appears that equality of educational opportunity, in terms of curricular choices, does not exist in Iowa" (Iowa State Department of Public Instruction, 1970). Burchinal (1961) confirmed rural-urban differences in a study which showed that rural youth have lower occupational aspirations than urban youth. The need to improve educational opportunity and attainment for rural youth has justified research into the process by which people attain occupations and into those factors which influence occupational attainment (Kuvlesky and Jacob, 1968).

Among the factors commonly associated with occupational attainment, higher educational level contributes substantially to successful outcomes. Further examination of the educational contribution to occupational attainment may, therefore, yield additional insights into the problems associated with the occupational decisions of rural youth.

The prediction of attainment is important for society in anticipating the problems that arise in developing and distributing human resources into occupational needs. The educational institution serves an allocative function by sorting and selecting individuals with appropriate talents for occupational careers. Also, because our society strongly believes in the individual's freedom to make choices, it has generally been assumed that a person's orientation toward a goal --

his aspiration -- is a major determinant in attainment of that goal. Kuvlesky and Bealer (1966) distinguished between aspiration and expectation in an attempt to clarify the concept of occupational choice. In a similar manner, Brookover, Erickson and Joiner (1967) raised objection to treating educational aspirations and expectations as synonymous. They showed that expectation was the more relevant because it correlated with academic achievement and socioeconomic status; whereas, correlations between aspiration and the same variables were reduced to near zero when expectation was statistically controlled.

Considerable research has been done on educational aspirations and expectations of youth with the assumption that they are determinants of attainment. Yet, only two studies could be found that related expectations to attainment. Siemans and Jackson (1965) reported a study done in Canada relating plans for post high school training with educational attainment one year later. The Youmans, Grigsby, King study (1965) was limited to college enrollment following graduation. There is urgent need for congruence studies of a longitudinal nature to validate expectation as a predictor of attainment. Congruence in this context means the degree of agreement between educational expectations and educational attainment.

The purpose of this study, then, is to provide greater evidence supporting the use of expectations as a predictor of

attainment by examining educational congruence of rural youth, by exploring some factors which might affect or be affected by congruence and by briefly investigating satisfaction with education and occupation as a possible consequence of congruence. The individuals in the sample were male and female high school seniors interviewed initially in 1948. The original sample size was 157. The nine high schools from which data were collected were located in towns with populations ranging from 100 to 1,800.

Subsequent data were gathered on the same respondents in 1956 with a sample size of 152, and again in 1967 with 143 of the same respondents in that sample. It was assumed that a span of 19 years was sufficient time to allow for completion of military obligations, occupational experience or any other delay in obtaining education. It even allowed sufficient time for the females of the sample who married and raised families to return for further education if this remained a viable intent over the years.

Longitudinal research has several disadvantages which may present problems to the researcher. Because the educational structure changes over time, significance of a longitudinal study may not be applicable to present patterns. Such studies allow only inferences to be made about educational practices now in existence. Of less importance is the time required between studies to observe the nature of the patterns under

scrutiny. Any advantage of greater time sequence for observation is offset by the increased potential for structural change. Despite such drawbacks, a longitudinal study of the relationship between educational expectations and attainments is needed to begin to isolate those factors that contribute to the prediction of attainment at the time students graduate from high school.

From a theoretical point of view, the present study attempts to add to the research on factors affecting occupational congruence. Since education and occupation are so highly related, it is hoped that examination of socio-economic and personal factors affecting educational congruence will refine the concept of occupational expectations as a predictor of occupational attainment.

Most occupational studies in sociology have examined occupational attainment in terms of society's needs and have viewed education as a major determinant. The individual, as well, stands to gain or lose in the attainment process. This raises the question of how educational congruence relates to individual satisfaction with education and ultimately to his satisfaction with occupational choice. The present study will present exploratory findings concerning the relationship of educational congruence to educational and occupational satisfaction. Hopefully, the exploratory findings will stimulate further theoretical development in

occupational attainment studies.

The study will have practical value for those who allocate educational resources and for guidance and counseling personnel. Greater accuracy in predicting enrollment will permit more effective use of resources allocated to and within post high school institutions. For guidance counselors, increased understanding of factors which influence educational and occupational attainment would be useful in attempting to modify those factors which tend to limit higher levels of attainment. Further, increased understanding of personal occupational satisfaction would be useful as counselors assist students in making educational and career decisions.

Objectives

1. To examine social background factors which may be related to educational congruence.

2. To examine the relationship between educational congruence and occupational congruence.

3. To examine educational and occupational congruence as it relates to occupational satisfaction.

4. To examine educational and occupational congruence as it relates to educational satisfaction.

THEORETICAL FRAMEWORK AND REVIEW OF LITERATURE

Introduction

Recognition that occupational achievement is based on the principle of the work ethic and modified by inequities of our equal opportunity ideology has resulted in research attempts to explicate the process of occupational achievement. Although our society professes a free and rational choice in this process, the individual is to some degree, governed by the norms of the social system to which he belongs or wants to belong. The ideology calls for choices within this process devoted to occupational selection.

Of the various types of research undertaken, two conceptual areas have received major attention. Educational plans and occupational aspirations each contribute significantly to the body of research investigating career decision-making. Both have been examined as dependent variables in relation to social and personal variables (Sewell et al., 1957, Burchinal, 1965), and both have contributed independent variation to occupational studies (Sewell et al., 1969 Harp and Morton, 1966). However, it remains questionable as to what part the plans and desires of young people take in attainment of adult occupational roles. A longitudinal study is requisite for such investigation.

Congruence between the educational plans of students and the activation of those plans is the major variable in this thesis. It will be examined first as a dependent variable in its relationship to several social factors. Thus, characteristics distinguishing educationally congruent students from those who are incongruent will be discussed in this chapter.

Educational congruence also will be examined in relation to occupational congruence. Defined as the agreement between aspirations and attainments, occupational congruence embodies a much longer time span within which educational congruence may occur. Consequently, educational congruence may be visualized as a variable in the occupational attainment process.

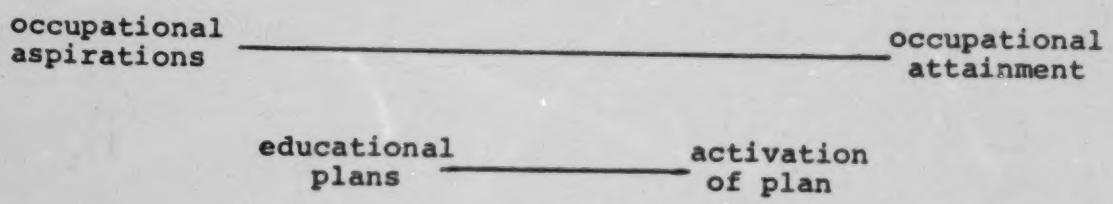

Figure 1. Educational congruence as a variable in the process of occupational congruence

A theoretical formulation of the relationship between these two concepts derived from the conceptualization of occupational attainment as a developmental process will be contrasted

to the linear approach common in occupational literature.

Educational congruence also will be examined as an independent variable as it relates to the long-range outcomes of occupational and educational satisfaction within the theoretical model developed in this chapter. The general pattern of satisfactions that may result from educational and occupational congruence as differentiated from incongruence will be discussed.

The last part of this chapter will summarize the conceptual areas and present hypotheses.

Linear Occupational Model

The point of occupational selection begins with aspirations on the part of the individual. Described as a wish or a desire, occupational aspiration has been examined as it relates to the individual's social experiences and personal attributes (Middleton and Grigg, 1959; Bordua, 1960; Sewell and Shah, 1968; Sewell et al., 1957). Occupational aspiration also has contributed to educational aspirations (Haller and Miller, 1963). That is, the desire for a particular occupation, in part, leads to the desire for the level of education that will improve the individual's chances for realizing that desire. Society supports both aspirations by insuring a minimum level of education by law. Educational desires beyond this minimum are assumed to spring from occu-

pational aspirations in the occupational achievement model.

Until recently, aspirations and expectations were concepts of similar meaning. Differences between them have been noted in both occupational and educational research. Kuvlesky and Bealer (1966) distinguished between aspirations and expectations definitively and coined the concept of "anticipatory deflection" as the difference between them (Kuvlesky and Jacob, 1968). Slocum's study (1958) on the educational plans of high school seniors indicated that 28 percent of the sample aspired to but did not intend to continue their education; whereas 45 percent both aspired and planned to continue. Expectations seem to be more stable and more likely to be actualized than aspirations. Thus, the temporal arrangement of the occupational achievement process over time might take the following configuration:

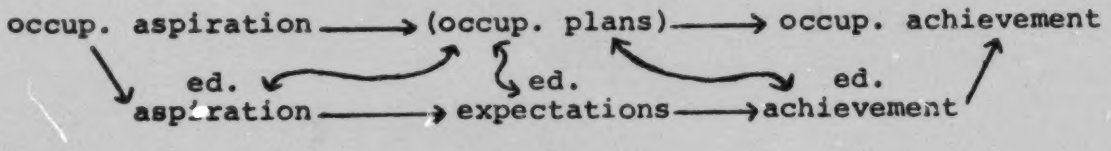

Figure 2. A linear conception of the occupational model

Level of educational achievement has long been related positively to occupational achievement. Blau and Duncan's statement (1967: 403) that "education exerts the strongest direct effect on occupational achievements", summarizes the well-

documented and widely publicized fact.

Emphasis in research on the occupational achievement process has been directed toward determinants of these concepts and the relationships among them (Sewell et al., 1969; Haller and Sewell, 1967). However, it is not clear what temporal position occupational plans has in the model. At times, it is considered as subject for implementation by education. Yet, plans have been subject to change within the educational process (Miller, 1960; Slocum, 1966: 193). Occupational plans also have been considered a motivating force for higher levels of education (Slocum, 1966: 187-188). It seems plausible that both might be occurring. Thus, occupational plans develop tentatively in the early life of the individual and change, modify or become more realistic over time.

The model of occupational achievement as diagrammed is a linear process of a continuously flowing phenomenon. It assumes a single-minded purpose as idealized in the work ethic (Slocum, 1966: 200). The steps in this process are conceptualized as aspirations and expectations leading cumulatively to achievement of an occupational goal (Haller, 1969 ; Burchinal 1962; Sewell et al., 1969). It suggests that certain classes of social systems affect the course of individuals enmeshed in this process which tends to alter the outcomes. Of these variables, formal education contributes greatly

to the consistency between the desired occupational goal and its achievement (Blau and Duncan, 1967; Sewell et al., 1969).

Occupational congruence studies illustrate the nature of the occupational model. The agreement between the types of occupation a person aspires to at one point in time and the type of occupation in which he is employed at another point in time is conceptualized as congruence (Kuvlesky and Bealer, 1967). The analysis of such data, although somewhat conflicting, indicates a moderate to low relationship between the two concepts. Porter (1954) uses a six-months' lapse of time and finds that 79 percent of his senior boys follows their plans. Kohout and Rothney (1964) report slightly higher rates of congruency during a five-year lapse of time than those same respondents show over a ten-year period. His 14 percent congruence is lower than that of Kuvlesky and Bealer (1967) who report 23 percent rate of congruence between aspiration and attainment ten years later. Analysis of the preceding data indicates the possibility that occupational aspirations are not good predictors of occupations attained. Yet, the longer the time span, the more likely it is that events in people's lives change the directions of occupational goals.

Occupational Process Model

The evolutionary nature of development warrants examination of the occupational model as a series of processes. That is, the occupational process may be conceptualized as a series of stages, each of which has an input, a through-put, and an out-put.[1] Each stage the individual goes through is an open-ended system leading in the direction of occupational achievement. The present stage evolves out of its preceding state so that the outcome of one stage contributes to the input of the next. The nature of the through-put, therefore, would influence any development noted in the out-put.

The flow of the process of occupational achievement is vulnerable to change over time. An important factor contributing to change is the maturity of the individual. Ginzberg (1951) describes three stages in the process which indicate a progressively more realistic view of a person's fit with societal demands. Ranging from fantasy through a tentative stage and continuing on through a realistic stage until actual entry into employment, his model identifies the normative transition in terms of age ranges. Thus, the early occupational thinking of children from age 6 to about 11 are fantasy-

[1]Katz and Kahn (1966) summarize the development of open-system theory to date. See also Parsons (1951) for utilization of the open-system approach.

based. In high school, from age 11 to about 18 or 19, the vascillation between one occupation and another makes choice somewhat tentative. The realistic stage, at about 18 or 19 years of age, requires decisions that affect the range of occupational choices.

Although most writers regard occupational choices as a developmental process which becomes more realistic as the person matures, no study could be found that uses Ginzberg's conceptualization of the occupational process. Instead, aspirations are defined as roughly compatible with a fantasy stage. Expectations are comparable to the tentative stage, with achievement variously defined as some level of activating plans, such as in the first job, or as some point in the more stable phase of the occupational process.

A factor which defines the change within the occupational achievement process is the limits of exposure from which an individual learns of alternatives and from which he ultimately makes choices. Examination of the literature shows that people of similar social backgrounds tend to have similar outcomes. Thus, children of college educated parents are more likely to attend college than children of parents who have not attended college, and children whose parents have white-collar occupations are more likely to attain occupations of white-collar status than those of laborers. Sewell and Orenstein (1965) suggest that an explanation for the

lower aspirations of low-status youths is the restriction of their adult contacts to those in lower-status occupational positions.

The explanation which finds support in the literature is found in reference group theory (Merton, 1957; Sherif, 1964). Through social interaction with important people and groups, a child begins to define his "self". The developing process of self definition as incorporating others' views toward him is vividly conceptualized by Cooley (1916) as "the looking-glass self". The self is further differentiated over time by various reference groups who reflect his potential and confirm his capability in some respects and not in others. Thus, the configuration of significant interaction with the individual's reference groups defines and clarifies his beliefs about himself as having certain skills, knowledge and personal attributes. The interaction between the person and a finite or perhaps limited social environment shapes that person's perception of himself in relation to future objectives. Burchinal (1962: 22) refers to the differences in work-related values between farm and nonfarm youth in Iowa. (see also Haller, 1960). Schwarzweller's study (1959) indicates that values of "service to society" and "mental work" are positively related to people who plan to attend college whereas values of hard work and security are negatively related. Lindstrom (1964) finds that status and prestige are

values of those who plan to attend college but "opportunity to be own boss" a value of those who plan not to attend.

Through social experiences in relation to others and within a social environment, the individual develops a hierarchy of values. Rosenberg (1957: 62) says, "when an individual chooses an occupation, he thinks there is something 'good' about it, and this conception of the 'good' is part of an internalized mental structure which establishes priorities regarding what he wants out of life". Although the importance of one value over another may change, the acquisition of certain values as differentiated from others is fairly well determined by the late teens. The fact that Schwarzweller (1959) finds that strength of values is lower for those who aspire to college education than for those who plan to attend, supports the hierarchial nature of values as well as the developmental nature of the process between aspirations and expectations.

Assuming that those distinctive values associated with various social systems are internalized and tend to shape the value orientation of the individual, are these values, then, impervious to change as one moves toward occupational achievement? Rosenberg (1959) notes that occupational choice affects the value orientation of the chooser. A manifestation of Robert Merton's "anticipatory socialization", the chooser begins to incorporate the values and behavior appropriate to

the occupation into his self-concept (Merton 1957: 265-266).

Miller (1960), in explicating some of the features of the educational organization which effects occupational choice, notes that 42 percent of the males who were prepared for specific occupations by their undergraduate training said they wanted to go on to graduate training. Interpreting this as evidence of change in existing values seems more appropriate than as evidence of the acquisition of values.

Super (1953) proposes a scheme similar to that of Ginsberg when he describes the career choice and adjustment process as a series of life stages. The exploratory stage, subdivided into the fantasy, tentative, and realistic phases, is followed by the establishment stage which also is subdivided into the trial and stable phase. The characterization of later stages are conceptualized as maintenance and decline. In other words, Super has expanded Ginsberg's conception of stages to include the span of a life time, but has not advanced theory about the nature of the process within each stage. Super, Ginsberg, and others agree, however, that the direction of the process depends on the choices that are made. The crux of the problem of occupational choice, Super (1953: 188) says, "is the nature of the compromise between self and reality, the degree to which, and the conditions under which one yields to the other, and the way in which this compromise is effected". It might be suggested, then, that the nature

of the through-put in the open-system model is one of compromise and the out-put as choice.

Blau et al., (1956: 542-543) conceptualize social structure as affecting occupational choice in two analytically distinct respects: "As the matrix of social experiences which channel the personality development of potential workers, and as the conditions of occupational opportunity which limit the realization of their choices". Their conceptual scheme identifies the evolving nature of occupational selection as "processes through which the patterns of selection at an earlier period influence those at a later one". Thus, what goes on in each of these processes is the variety of social experiences which channel personality development and results in a choice. The choice itself, then, defines the next stage through which the individual has more social experiences at a higher level of development which further channels personal development.

The nature of human development suggests that important determinants influencing the individual at one stage may be only indirectly influential in the next stage. For instance, Wolfle (1954: 163) notes in the analysis of national data that once a student enters college, "his chances of graduating are much more dependent upon his ability and much less upon his family background than were his chances of getting into college in the first place". He notes that economic and

social factors are important in determining which children graduate from high school and enter college, but he classifies a measure of socioeconomic background as an indirect relationship to an individual's attainment of higher educational objectives.

Ginzberg (1951) points out that in the social experiences of every person there are countless stimuli that might influence occupational choice, but only a few do so. Blau et al. (1956) classify those "few stimuli" by specifying the characteristics of individuals that determine occupational entry: (1) technical skills to perform occupational duties, (2) social characteristics of a person that influences a potential employer, and (3) a person's own values that determine which employment conditions constitute rewards. They rephase by adding, "...unless a social experience or attribute affects the information individuals have about occupations, their technical or social qualifications for entry, or their evaluation of occupations, it is not expected to influence their careers" (Blau et al., 1956: 536). Therefore a choice may be made as a result of certain types of interactions which support the skills, attributes and reward values that determine occupational entry. It seems likely that inconsistency in social interaction would modify the ideal in the individual case in two ways: (1) require more time for a decision, and/or (2) delay the development of a

set of values.

There remains, the theoretical problem of identifying conceptually, the point at which the individual is transported from one stage to another in a hypothetically fluid process. In the occupational model, the transcending point has been variously defined as occupational plans, educational plans, career decisions or plan fulfillment, and have been differentiated from other outcomes such as career or educational aspirations and occupational entry. Kuvlesky and Jacob refer to the problem of the degree of certainty contributing variation to the measurement of expectation (Kuvlesky and Jacob, 1968: 5). Expectations and decisions are internal affairs and can only be inferred. They are not subject to confirmation by oneself or by others until action is taken. The action is a reality outcome of decision. Thus, to plan to go to a post high school educational institution is an internal decision on the part of the individual; to enroll in the institution is the crucial point which has consequences on the individual's choices of occupation.

Failure to act is, in fact, to have made a decision which has consequences for the individual, because society has norms for expected behavior. Although the time-tables for action allow some individual variation, tolerance for deviancy is limited. Therefore, the consequences of a person's failure to act is essentially for society to have made the decision for

him.

Although very little is known about the process of decision-making, the theoretical issues outlined above suggest a rough formulation of variables as a possible framework for examination. They are proposed in the following diagram.

In the first stage, interaction between the social background of the individual, his reference groups and native potential contributes to development of values which are compromised, one with another, until society demands and/or the individual is ready to commit himself to action. Each decision which is accompanied by action in the process limits the potential alternatives for the next decision. Because some level of education is requisite to qualify for entry into many occupations, educational decisions are prime factors in the limiting process. Assuming that a prior decision to drop out of high school has not been acted out, the major decision is in regard to post high school education. If the individual chooses this course of action, he has then not only limited his alternatives and committed himself to some extent, but enters the second stage of the model which provides time to anticipate and fantasize about the future in relation to himself and apart from his previous social ties.

The through-put of the second stage is characterized by interaction between the individual who has abilities and reward values and the conditions of occupational opportunity.

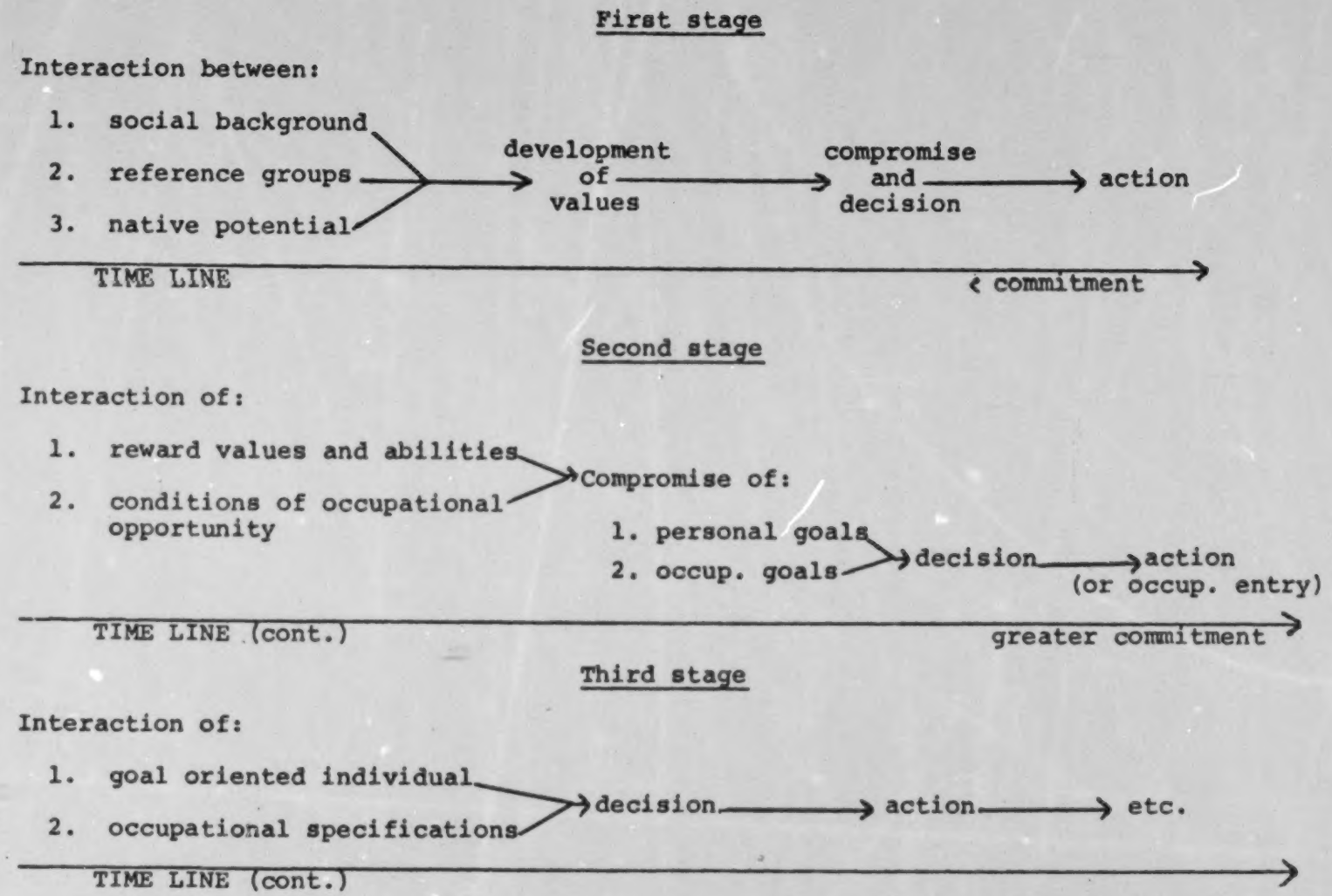

Figure 3. Occupational process model

Compatibility among them, as viewed by the individual, is likely to require further compromise leading to a juxtaposition of more realistic personal goals with occupational goals. Occupational entry is the action outcome of this stage.

The third stage is indicated by interactive effect between the goal-oriented individual and the specifications of the job. Theoretically, additional stages might occur depending on the degree of compatibility in the third stage along with other personal-social events in the individual's life that may change values, goals and job specifications leading to further action.

Measurement of occupational congruence has been in terms of the first stage as compared to the third stage. Results of research show that no significant relationships exist between variables in the first stage with ultimate action taken toward occupational goals. Level of education is most influential in occupational congruence. In terms of the proposed model, three propositions might be made.

1. Because the stages build upon one another, development of values reflects preparation for the first primary decision. The impact on the person from the first stage is incorporated and no longer provides the forward thrust on the next stage.

2. Other variables take precedence in the second stage. Blau's determinants for occupational entry (see p. 16) might,

in fact, be ordered and one takes precedence over the other in the three stages.

3. Although these stages can be collapsed together by consistency in an individual's relationship to his environment, increasing inconsistencies in our world, exemplified by rapidity of change, brings the second stage into focus as a necessity. In this respect, migration might be considered an outcome of inconsistency between an individual's aspirations and the environment's support of those aspirations.

While society is increasing it's educational requirements for occupational entry, greater inconsistency in the individual's background requires some socialized means for "trying on" various roles or life styles without suffering the consequences that might attend such experiments in real life. Although there are other institutionalized means for delay such as the military, VISTA, or the Peace Corps; society more highly values post high school education as prerequisite to occupational entry.

Acting on one's plans is a turning point in the process of achieving long-range occupational goals: (1) it limits the alternatives for the future, (2) it assumes that the person choosing the alternative anticipates the social experience as potentially improving his skills and qualifications for reaching a goal, and (3) that he evaluates himself as poten-

tially capable of such experience. To the extent that there is agreement between the social system into which the individual plans to enter and the individual's assessment of himself in relation to the social system, action is likely to occur. The concept congruence, then, refers to this agreement. Its social manifestation is the action taken in regard to plans. Incongruence refers to disagreement between plans and action.

Although Siemans and Jackson (1965) conducted a study of plan fulfillment, they use a three-level status hierarchy of post high school courses. Thus, if a person plans to go to one type of school and changes to another at a lower level, he is judged as not having fulfilled his plans. Within the theoretical framework of this thesis, the fact that the action carries him into the second stage allowing for further occupational development is the pertinent issue. In the Seiman and Jackson study, the 48 percent of those who planned to go beyond high school and did so can not be compared to an estimate of congruence as defined in this study.

The Nam and Cowhig data (1962) are more relevant to congruency as defined here. Figures from their national study based on census bureau data indicates that 68 percent of all high school graduates were congruent between their plans and enrollment in college one year later and 22 percent were incongruent. Although Nam and Cowhig define congruence

as proposed above, their incongruent group includes those persons who were undecided about college plans. According to the data presented (Nam and Cowhig, 1962: 15), the 22 percent cited above is a generous figure for the incongruent group when those who are undecided are excluded.

One of the problems indicated by several researchers is the fallacy that all action as indicated in the model is rational (Miller and Form, 1951; Slocum, 1966; Ginzberg et al., 1951). Slocum says, "a fully rational occupational choice is one that is arrived at on the basis of a systematic and objective evaluation of such factors as personal aptitudes and capacities, values and interests, and the prospective rewards and disadvantages associated with various occupational fields and occupational roles ... at the present time, however, ... most occupational choice decision-making ... is properly classified as either mixed or non-rational" (Slocum, 1966: 208-209).

Again, the assumption of a single-minded purpose for decision precludes the possibility that the reward anticipated and thus the value held by the individual decision-maker is occupationally oriented. The first major decision, an educational one, may well be governed by occupational goals. However, Dole's study shows that reasons offered by students in prospect and retrospect for an educational plan or decision are more often concerned with personal satisfac-

faction, previous experience, influence of friends and intellectual stimulation (Dole, 1964). In the theoretical model proposed above, the reason is less pertinent than the type of action which either propels him into the second stage and redirects the viable nature of the social interaction process or forces him to enter the third stage by abridging the time and interaction necessary for a more rational occupational decision. It seems likely that the conditions under which rational occupational goals can be accomplished will be those experiences which allow the individual to go through the first two stages before occupational entry.

Two conditions might bear on the process in the first stage to modify the second stage or eliminate it entirely. The first condition would be the situation which includes both types of interaction in the first two stages within the time span of the first stage. Work programs, experience in the occupational category aspired to and the person's analysis of himself as a working person could be examples of interaction in the second stage which might take place in the high school years. The second condition might be a person's exposure to a relatively consistent pattern of social experiences so that social background and reference groups support the individual's occupational aspirations and confirm his abilities to attain his occupational desires, thus,

collapsing the time span of the two stages into the time of the first stage in a different manner.

It is likely, then, that when a farmer's son wants to be a farmer, learns to value the life a farmer lives, learns the skills of a farming occupation, when others support a view of himself as a potential farmer and the family's economic situation supports his plan, he would pass rather rapidly through both the first and second stage, acting out his personal and occupational goals by entering the occupation of farming. Yet, if this farmer's son could not plan on farming because the economic situation did not support it, for example, then this inconsistency suggests that interaction at the second stage leading to compromise of personal values with occupational opportunities must take place before action can be realistic. The latter example illustrates the "push" pattern of rural to urban migration (Slocum, 1966; Hodges, 1970).

The likelihood of the former example occurring is decreasing with the rural-to-urban migration still in progress but, to the extent that the development of values appropriate to urban life style is consistent with diverse occupational opportunities, the "pull" pattern of migration is perhaps more evident. Slocum notes that young migrants from farms cannot hope to rise in the occupational world if they are not well educated (Slocum, 1966: 163). From the model this

thesis proposes, it may be hypothesized that post high school education is a necessity for the young migrant in order to gain the developmental opportunities afforded by the second stage. By exposing the migrant to new values and behavior standards, post high school education might provide the time and interaction needed to change the hierarchy of values more appropriate for occupational opportunities available to him.

Satisfaction

Recognizing the evolving nature of an individual's occupational development does not stop at a particular age or with a particular open-ended system such as the first job. Occupational achievement not only requires a long period of time, but social interaction continues and change is likely to occur. The forward orientation of life, itself, assumes a future toward which the individual aspires. The through-put of each social system the individual enters results in expected or unexpected rewards (or lack thereof) which support or refute his expectations for succeeding systems. Without attempting to identify all the systems through which a person might proceed in occupational development, society itself, the most general over-riding system, is assumed to be concerned that no group of people be disadvantaged. Each individual is to make best use of his potential for the betterment of society. Described as the

American ideology, the assumption at best describes only half of the interaction of the through-put between society and the individual. As indicated earlier, the rewards for the person taking action support the "goodness" of his choices or society's choices for him by default. The outcome of the occupational model is not viable without considering the individual's desires and his realistic appraisal of choices as contributing to self-actualization (Argyris, 1957: 49-51). Because of the wide variety of potential rewards other than occupational ones that people can expect from their actions, it is not feasible to consider them separately here. However, rewards for action are meant to bring satisfaction to the actor. Caplow indicates that "not until later in his career will the average man be able to sum up his total expectations with some degree of finality and measure them against his remaining aspirations so as to arrive at a permanent sense of frustration, a permanent glow of complacency or an irregular oscillation from one to the other" (Caplow, 1954).

The nature of a longitudinal study involving 19 years seems particularly appropriate in discerning relationships between both educational and occupational congruence and satisfaction. Although no studies have been found that related congruence directly with satisfaction, evidence indicates that satisfaction cuts across several commonly used

classifications which distinguish variations in occupational achievement. For instance, Nelson (1971) finds that educational satisfaction was not associated with rural and urban residence. Youmans et al.,(1963) finds no significant difference between high school dropouts and graduates, both rural and urban, in job satisfaction. Yet, his Kentucky respondents have strong beliefs in the value of formal education. The latter study indicates that education may be desired but not necessary to occupational satisfaction.

A consistent social background has been hypothesized in this thesis as a condition of congruence between plans and action regardless of whether the action taken is post high school education or occupational entry. Sewell et al., (1953) indicates that persons having attended high school are much more likely to favor high school education than those who do not attend high school. Nelson (1971) shows a dramatic relationship between gratification derived from the academic environment and the percentage aspiring to college. Yet, those who do not so aspire and are satisfied with school more often live in rural areas. In the same study, he finds that the higher the class, the more likely it is that adolescents consider school a rewarding experience.

Going to school can be a gratifying experience apart from its value in contributing to a person's occupational future. Little (1958) notes that enjoyment in learning is a

value more frequently emphasized by children of parents who have attended college. Nine out of ten high school graduates in his study, who said high school studies were uninteresting, were not continuing their education.

The observation that adults with relatively poor education and low-status jobs are not interested in education for its own sake is, perhaps, more applicable to an occupational orientation and less to a value orientation. Slocum (1966) describes a study by Dunkelberger who indicates that the relatively low expectation for occupational placement of male household heads in low income areas of the rural south was a result of high aspirations which had been readjusted downward in accordance with their perceptions of opportunity. Nearly all of them expressed their high latent aspirations by wanting high status level occupations for their sons (see also Krauss, 1964).

It seems likely from the evidence presented that occupational congruence is an important condition for occupational satisfaction and that educational congruence is a condition which enhances this possibility of occupational satisfaction regardless of whether the person is occupationally congruent or incongruent. Thus, people who aspire to an occupation and are satisfied with their present occupation are more likely to show agreement between educational plans and action. When the individual is occupationally incongruent

post high school education figures prominently in occupational satisfaction. For those who are both occupationally and educationally incongruent, the unmet aspirations are likely to be desired for one's children as a means of gaining satisfaction vicariously.

Since educational satisfaction can be derived from two different orientations, it may have two functions in the examination of congruence. Educational plans and educational levels are both partially related to occupational congruence. The occupational orientation of education makes plausible the possibility that occupational congruence enhances the relationship between educational congruence and educational satisfaction. The theoretical model proposed in this thesis indicates this possibility by the developmental nature of the second stage and the consistency of the first stage both of which defines the hierarchy of values from which the individual judges himself and his place in society (Slocum, 1966, p. 959).

The relationship between educational congruence and educational satisfaction has the added value of enjoyment in learning for personal satisfaction as separate from education for occupational gain. It seems likely that the dual role education plays in the life of the individual will increase the percentage of those who are educationally satisfied over those who are occupationally satisfied.

Summary

The preceding theoretical framework, drawn from a review of the literature, is an attempt to make a process more viable by including the maturation of the individual as a dynamic part of that process. Occupational attainment involves a realistic appraisal of one's chances for gaining a desired occupation in relation to his social and personal attributes. His comparison level is framed by his social origins and the encouragement of those who hold values and expectations for him and reflect his native ability.

Occupational decisions involve the acting out of plans which permit the compromise between personal values and conditions of occupational opportunity. A major action within the occupational attainment process is attendance in post high school educational institutions. Society is increasing its demands for education prerequisite to occupational entry. Apprenticeship and inheritance preclude this step, but as both kinds of occupational opportunities decline, institutionalization of a step in the occupational process which permits compromises that are necessary for realistic goal formation seems necessary. Post high school education provides both the time and the appropriate interaction to take place.

The overt carrying-out of plans may indicate something

about the realism of a person's orientation toward an occupational goal. The congruence between plans and action could describe something about the individual's maturity. It also may indicate that an individual's exposure to a relatively consistent pattern of social experiences holds more potential for achievement than experiences and background which vary in pattern or which have conflicting components. The action an individual takes has potential for reward which is anticipated in that person's decision. Action may or may not be occupationally oriented from the individual's viewpoint but has occupationally relevant outcomes. The present study analyzes educational and occupational congruency in its long-range outcomes for the individual in terms of satisfaction.

Definitions of Key Concepts

Definitions of the key concepts as used in this thesis follows:

College - any post high school educational institution requiring a high school diploma.

Educational congruence - agreement between plans to attend college and actual attendance at some college.

1. Those who planned to attend college in 1948 and had attended by 1967.

2. Those who did not plan to attend college in 1948 and had not attended by 1967.

Educational incongruence - disagreement between plans to attend college and subsequent action.

1. Those who planned to attend college in 1948 and had not attended by 1967.
2. Those who did not plan to attend college in 1948 and had attended some college by 1967.

Undecided - Lack of written commitment about plans for attending college.

1. Those who were undecided about attending college in 1948 and had attended by 1967.
2. Those who were undecided about attending college in 1948 and had not attended by 1967.

Occupational congruence - the agreement between the type of occupation aspired to in 1948 and the type of occupation the respondent held in 1967 according to the Edward's socio-economic grouping of occupations.

Post high school education - those respondents who acquired part or all of an advanced education in a recognized vocational institution, junior college, college, university or other educational institution requiring a high school diploma.

Occupational prestige status - the status position of the occupation the parents of a respondent hold according to the North-Hatt Scale.

Highest number of years parental education - highest number of years completed of formal education by either parent.

Discussion of future plans - whether a respondent discussed his future plans with parents frequently, infrequently, or not at all.

Jobs while in high school - whether or not the respondent held summer jobs, weekend jobs, or jobs after school while attending high school.

Type of job - classification of jobs according to Alba Edward's classification system.

Educational aspirations for first born - those respondents who desire a level of education for their first born child.

Occupational aspirations for first born - those respondents who desire an occupational level for their first born child.

Educational satisfaction - of those respondents who were educated beyond high school, those who would do so if they were doing it over again; and, of those respondents who were not educated beyond high school, those who would not do so if they were doing it again.

Occupational satisfaction - whether respondents were very satisfied, satisfied, neutral or dissatisfied with their present occupation in 1967.

Statement of Hypotheses

Educational congruence is the concept of each hypothesis despite the fact that it is conceived as functioning within the relationship between one's occupational aspirations and subsequent attainment. The time span involved in a respondents' educational plans as a senior in high school and activation of those plans is relatively short and usually achieved within a few years. Yet, whether or not those plans are activated has impact on the direction of his occupational endeavors. Educational congruence is the important link between occupational aspirations and long-range outcomes.

The relationship between educational congruence and social background factors preceding action as proposed by the first stage in the theoretical model will be examined in General Hypothesis I. The extent to which educational congruence functions in the service of occupational congruence will be examined in General Hypothesis II. The relationship of educational congruence to occupational congruence as it affects far-reaching outcomes of educational and occupational satisfaction will be examined in the remaining hypotheses.

The hypotheses are first stated in a general form indicating the nature of the theoretical relationship between concepts. The subhypotheses, which are more specific in nature, are followed by empirical hypotheses indicating the relationship between operational measures.

Social background and educational congruence

General Hypothesis I: Educational congruence is related to social factors in an individual's background.

Sub-hypothesis 1: The educationally congruent individuals will have parents with higher socioeconomic status than will educationally incongruent individuals.

Empirical hypothesis (1): Those who have educational congruence will have parents with higher occupational prestige scores, than those who have educational incongruence.

Empirical hypothesis (2): Of the educationally congruent, those who planned to attend and did attend college will have parents with higher occupational prestige scores.

Empirical hypothesis (3): Of the educationally incongruent, those who did not plan to attend college but did so will have parents with higher occupational prestige scores than those who planned to attend but did not attend college.

Empirical hypothesis (4): Of those who are undecided, those who attended college will have parents with higher occupational prestige scores than those who did not attend.

Sub-hypothesis 2: The educationally congruent individuals will have parents with higher educational background than will the educationally incongruent.

Empirical hypothesis (5): Those who have educational congruency will have parents who have more years of education than will those who are educationally incongruent.

Empirical hypothesis (6): Of the educationally congruent, those who planned to attend a post high school institution and did so will have parents with more years of education than will those who neither planned nor attended post high school institution.

Empirical hypothesis (7): Of the educationally incongruent, those who did not plan to attend a post high school institution but did so will have parents with higher educational level than will those who planned but did not attend college.

Empirical hypothesis (8): Of those who are undecided, those who attended a post high school institution will have parents who have more years of education than will those who did not attend.

Sub-hypothesis 3: The educationally congruent individuals will seek advice concerning future plans from

parents more often than will the educationally incongruent.

Empirical hypothesis (9): Those who have educational congruence will have higher frequency of discussion of future plans with parents.

Sub-hypothesis 4: The educationally congruent individuals are more likely to have worked at jobs while in high school than those who are educationally incongruent.

Empirical hypothesis (10): More of those who have educational congruence will have worked at jobs while in high school than will those who have educational incongruence.

Educational and occupational congruence

General Hypothesis II: Educational congruence is related to occupational congruence.

Sub-hypothesis 5: The educationally congruent will more likely be occupationally congruent than those who are educationally incongruent.

Empirical hypothesis (11): Those who have educational congruence will hold the type of job in 1967 that they aspired to in 1948.

Sub-hypothesis 6: If individuals who are undecided or incongruent in relation to education attend some post

high school institution, they are more likely to be occupationally congruent than those who enter jobs without further education.

Empirical hypothesis (12): Of those who are undecided or educationally incongruent, those who have had some formal training beyond high school will hold the type of job in 1967 that they aspired to in 1948.

Educational and occupational satisfaction

General Hypothesis III: Occupational satisfaction is related to occupational and educational congruence.

Sub-hypothesis 7: Occupational satisfaction will be greater for those individuals who show educational congruence than for those who are educationally incongruent.

Empirical hypothesis (13): Those who have educational congruence will score higher in satisfaction with their present occupation.

Sub-hypothesis 8: Individuals who are occupationally dissatisfied are more likely to have higher educational and occupational aspirations for their children than they are able to achieve for themselves.

Empirical hypothesis (14): Those who have low scores in job satisfaction will have higher educational aspirations for their first born child than they were able to achieve.

Empirical hypothesis (15): Those who have low scores in job satisfaction will have higher occupational aspirations for their first born child than they were able to achieve.

General Hypothesis IV: Educational satisfaction is related to to educational and occupational congruence.

Sub-hypothesis 9: Individuals who are educationally congruent are more likely to be satisfied with their level of education.

Empirical hypothesis (16): Those who have educational congruence will score higher in satisfaction with educational achievement.

Sub-hypothesis 10: Individuals who are occupationally congruent but educationally incongruent are more likely to be satisfied with their level of education than those who are educationally congruent and occupationally incongruent.

Empirical hypothesis (17): Of those whose occupational and educational congruence are not consistent, those who have occupational congruence and educational incongruence will be more satisfied with

their educational achievement.

Sub-hypothesis 11: More individuals are educationally satisfied than are occupationally satisfied.

Empirical hypothesis (18): The proportion of educationally satisfied respondents will be greater than the proportion of occupationally satisfied respondents.

METHODS AND PROCEDURES

Introduction

The first section of this chapter explains the data-gathering process. Next is an explanation of the measurement techniques used in each stage of the theoretical model and corresponding to the order of the general hypotheses. Each independent variable will be operationally defined as used in order of it's appearance in the empirical hypotheses. The last section identifies the statistical techniques applied in testing the hypotheses.

Data-gathering Process

The research design is a longitudinal study beginning in 1948 and ending in 1967 with interim data gathered in 1956. In 1948 the first study was conducted when respondents were seniors in eight rural high schools in Hamilton County, Iowa. Story City High School was substituted for Webster City High School when the latter refused to participate in the study. Story City is located directly south of Hamilton County and is sufficiently similar to Hamilton County towns so that its participation did not distort the research design. The respondents of the nine schools provided a large enough sample to analyze statistically.

In 1948, there were 157 (90 percent) students who

responded to the written questionnaires on background characteristics, occupational aspirations, educational plans and attitudes toward high school, town living and country living. At that time, Hamilton County was comprised of farms and small towns with agriculture the basis of it's economy. The county was a rich agricultural county producing mainly corn and livestock. This county was aptly characterized by Bohlen (1948), who reported the original data. The county also was selected for research by the Division of Farm Population and Rural Life of the U.S. Department of Agriculture in cooperation with several land-grant colleges and universities (Jehlik and Wakeley, 1949).

In 1956, data was collected from 152 of the initial 157 respondents. Of the 5 not included, two were deceased and three did not wish to respond a second time. Eighty-seven percent of those responding were interviewed personally. For the remaining thirteen percent, a special modification of the original schedule was prepared for mailing. Hildahl (1961) analyzed the second phase of the data.

In 1967, an additional restudy was conducted by mailed questionnaire. There were 143 questionnaires completed with ten of them gathered by personal interview. Of the 9 not included in the third study, one was deceased, seven did not wish to respond a third time and 1 had incomplete data. In the present study, the sample size is 143 respondents which

includes all who participated in each of the three studies.

Measurement

Educational congruence is the central variable of this thesis. The intention is to examine the significance of educational congruence in its relationship to consistency of social background, occupational congruence and as an independent variable in educational and occupational satisfaction.

Education congruence

Educational congruence is operationally defined as the agreement between the respondents' 1948 answer to the question, "Do you intend to go to college", and their subsequent actions in that regard. There are two forms of agreement thus defined in this concept. If the respondent intended to pursue his education beyond high school and did so, he would be educationally congruent. If the respondent did not intend to engage in advanced education and did not do so, he would also be educationally congruent.

Similarly, educational incongruence takes two forms. Those who responded affirmatively to the same question in 1948 but had no post high school training, and those who did not plan to attend, but did attend some post high school institution, are educationally incongruent.

The theoretical views of this thesis suggest the exam-

ination of those respondents who were undecided about their intentions. Defining the undecided group in relation to their subsequent action takes two forms: (1) those who were undecided about attending in 1948, but did eventually attend some advanced educational institution, and (2) those who were undecided and did not attain advanced education beyond high school. Data in Table 1 show the respondents' 1948 college intentions with action taken by 1967.

Table 1. Respondents' 1948 college intentions with action taken by 1967

College intentions in 1948	Action of 1967 respondents					
	Attenders		Nonattenders		Total	
	No.	%	No.	%	No.	%
Yes	43	30.1	6	4.2	49	34.3
No	7	4.9	39	27.3	46	32.2
Undecided	12	8.4	36	25.2	48	33.6
Total	62	43.4	81	56.6	143	100.0

$\chi^2 = 60.747$, d.f. = 2 (.001 level = 13.815)

Examination of Table 2 shows that 57 percent of the sample (82) were educationally congruent, 9 percent (13) were educationally incongruent and about 34 percent (48) were undecided. Of the undecided group, three-fourths (36) had no education beyond high school.

Table 2. Respondents' 1967 educational congruency status

Congruency status	No.	%
Educational congruency	82	57.3
Educational incongruency	13	9.1
Undecided	48	33.6
Total	143	100.0

Consistency of social background

Four variables used in measuring the consistency of the respondents' social background will be operationally defined: Social status of parents, number of years the respondents' parents went to school, the frequency of advice respondents sought concerning future plans, and whether respondents worked at jobs while in high school.

Social status of parents There are three major operational measures used as indicators of social status: income, education and prestige of an occupation within the social structure. In the present thesis, occupational prestige is used as the basis for determining social status while education is considered separately. Occupational prestige is more useful in this study than income because:

1. The occupational prestige hierarchy has proved to be remarkably stable over time (Haller, 1969; Blau and Duncan, 1967). The longitudinal nature of the study makes it diffi-

ult to find a measure to serve as a basis of comparison etween one generation and another. Major changes in the alue of the dollar over time make income a more tenuous easure. However, there is a positive, though imperfect elation between income and occupational prestige position Haller, 1969).

2. Because of the nature of a farming operation, ash income of farmers is probably lower than their real ncome and therefore, less comparible with nonfarm income. he large number of farmers in the study could bias the in- ome comparisons.

3. Occupational prestige includes the net balance of ncome and other rewards offered by an occupation. Income s only one of the rewards of an occupation.

4. Information on the occupation of the respondents' athers is known; whereas, income is not available data.

Occupational prestige is measured by the North-Hatt cores for 88 occupations, plus the more recent interpolated cores for approximately 400 additional occupations (Bauder nd Burchinal, 1965). The scores for both the North-Hatt cale and the interpolations range between 33 and 96, 6 being the highest prestige occupation. Both were used to ate the occupations of the respondents' fathers in 1948. ata in Table 3 show the distribution of occupational prestige

scores for the fathers of the respondents.

Table 3. Distribution of occupational prestige scores for fathers of respondents

Occupational prestige scores	No.	%
44	2	1.4
45	1	0.7
52	2	1.4
54	3	2.1
55	2	1.4
56	1	0.7
59	2	1.4
60	3	2.1
62	1	0.7
63	1	0.7
65	6	4.2
66	2	1.4
67	1	0.7
68	42	29.4
70	9	6.3
75	1	0.7
76	48	33.6
78	1	0.7
80	1	0.7
84	1	0.7
86	4	2.8
88	1	0.7
92	1	0.7
93	1	0.7
No data	6	4.2
Total	143	100.0

Educational level of parents Three independent variables are considered in the educational level of parents: number of years the respondent's father attended school, number of years the respondent's mother attended school, and highest number of years either parent attended school. For

analysis of the latter variable, three classifications of educational attainment are used. When the highest parental education falls between 5 and 8 years, it is considered low. Between 9 and 12 years of education is considered medium, and the high group includes parental education above 12 years. Data in Table 4 show the respondents' fathers' educational attainment by number of years.

Table 4. Respondents' fathers' educational attainment

Number of years of education	No.	%
5	1	0.7
6	5	3.5
7	4	2.8
8	81	56.6
9	5	3.5
10	6	4.2
11	1	0.7
12	15	10.5
13	3	2.1
14	6	4.2
15	1	0.7
16	3	2.1
17	1	0.7
18	2	1.4
19	2	1.4
20	1	0.7
Not applicable	1	0.7
No data	5	3.5
Total	143	100.0

Data in Table 5 show the respondents' mothers' educational attainment by number of years.

Table 5. Respondents' mothers' educational attainment

Number of years of education	No.	%
4	1	0.7
6	3	2.1
7	2	1.4
8	45	31.5
9	5	3.5
10	8	5.6
11	7	4.9
12	39	27.3
13	4	2.8
14	13	9.1
15	2	1.4
16	7	4.9
No data	7	4.9
Total	143	100.0

Table 6 classifies the highest level of educational attainment by either parent in categories of high, medium and low.

Table 6. Highest level of parental educational attainment

1948 parental educational attainment	No.	%
low, 4-8 years	48	33.6
medium, 9-12 years	57	39.9
high, 13 + years	35	24.5
No data	3	2.1
Total	143	100.0

Discussion of future plans This concept refers to the frequency with which the high school seniors in 1948 discussed their future plans with their parents and others. Discussion with parents is operationally defined as whether a respondent discussed his plans for the future with his parents. The definition implies that frequent discussion of future plans with parents is a measure of adequacy in terms of the discrepancy between the actual and the remembered frequency. It assumes that parents reflect the young person's capabilities and guide the discussion in ways that help their offspring make viable decisions. Since this is not necessarily the case, and since the three categories allow for wide variation in respondents' interpretation, a cross analysis is made regarding the same question in the 1967 schedule. Data in Table 7 show the respondents' 1948 and 1967 frequency of discussion about plans with parents for the future and in retrospect. The remembered frequency is not significantly different from the actual frequency indicating that discussions were adequate.

Data in Table 8 show the difference between the 1948 and 1967 responses to the frequency of discussion about future plans with parents.

Table 7. Cross analysis between respondents' frequency of discussion with parents in 1948 and 1967

Discussion with parents, 1948	Discussion with parents, 1967: Frequently		infrequently		not at all		total	
	No.	%	No.	%	No.	%	No.	%
frequently	36	25.4	46	32.4	8	5.6	90	63.4
infrequently	11	7.7	26	18.3	9	6.3	46	32.4
not at all	1	.7	4	2.8	1	.7	6	4.2
Total	48	33.8	76	53.5	18	12.7	142	100.0

$\chi^2 = 6.059$, d.f. = 4 (.05 level = 9.49)

Table 8. Congruency of 1948 and 1967 responses to frequency of discussion about future plans with parents

Congruence between 1948 and 1967 responses	No.	%
congruent	63	44.1
incongruent	79	55.2
No data	1	.7
Total	143	100.0

Although parents are, perhaps, more commonly engaged in discussion about one's future plans, other reference groups in the respondents' environment may well have provided the needed discussion. Data in Table 9 indicate that 66 percent (95) of the sample seek most of their advice from their parents, 12 percent (17) seek most of their advice from

others, and 22 percent (32) indicate no one or give no response.

Table 9. Respondents' 1948 advice-seeking

To whom for advice	No.	%
parents	95	66.4
teachers	6	4.2
professional people	2	1.4
relative	6	4.2
peer friend or fiance	2	1.4
no one	19	13.3
no response	13	9.1
Total	143	100.0

Work outside of high school In 1948 respondents were asked to identify any jobs they had outside of school work and to list any jobs they had in the past two years. The work outside of high school variable is defined as any summer jobs, weekend jobs or jobs after school held by respondents while attending high school. Data in Table 10 indicate those who worked sometime during their last three years of high school and those who did not.

Table 10. Respondents' work outside of high school

Work outside of school	No.	%
yes	70	49.0
no	70	49.0
no data	3	2.1
Total	143	100.0

For purposes of clarifying this independent variable in relation to the theoretical views proposed in this thesis, a further specification is appropriate. Many young people work in the business of their parents. Part-time jobs outside of the family business may well help in expanding the individual's knowledge of occupations, make the specifications of other occupations more clear, and provide a situation of relative independence from the family for potentially greater maturity. The figures differentiating respondents who worked for their parents from those who had jobs outside the family business are shown in Table 11.

Table 11. Family association to job held by respondents

Jobs held	No.	%
within family business	65	45.5
outside of family business	61	42.7
no answer	16	11.2
no data	1	.7
Total	143	100.0

Occupational congruence

The second stage for methodological consideration is the relationship between educational congruence and occupational congruence under General Hypothesis II. Occupational congruency refers to the agreement between the type of occupation aspired to in 1948 and the type of occupation the respondent held in 1967 according to the Alba Edward socio-economic grouping of occupations.

The respondents in 1948 were asked to identify three occupations and specific jobs within those fields they would like best to do after leaving school. The data were categorized into one of eight socio-economic groupings according to the Census classification of occupations, commonly known as the Edward's Scale (Edwards, 1934: 164-169). In 1967, respondents were asked to list the specific jobs in which they had been employed for the preceding 12 years. The most

recent job held by the male and single female respondents was classified according to the Edward's Scale. Data in Table 12 show the respondents' type of occupation aspired to in 1948 and type of occupation in which respondent is presently employed.

Table 12. Type of occupation desired in 1948 and type of occupation in which respondent is presently employed

Occupational category	Aspirations 1948		Attainments 1967	
	No.	%	No.	%
Professional, technical and kindred workers	54	45.8	20	16.9
Farmers, farm managers	20	16.9	16	13.6
Managers, officials and proprietors, except farm	0	0	8	6.8
Clerical and kindred workers	27	22.9	10	8.5
Sales workers	0	0	6	5.1
Craftsmen, foremen and kindred workers	7	5.9	4	3.4
Operatives and kindred workers	0	0	3	2.5
Service workers, including private household	6	5.1	4	3.4
Laborers except farm and mine	1	.8	4	3.4
Housewife	3	2.5	42	35.6
Service	0	0.0	1	.8
Subtotal	118	100.0	118	100.0
no data	25	-	25	-
Total	143		143	

$\chi^2 = 163.097$, d.f. = 60 (.01 level < 88.38).

Table 13. Respondents' 1967 occupational congruency status

Congruency status	No.	% of n=143	% of n=118
Occupational congruency	38	26.6	32.2
Occupational incongruency	80	55.9	67.8
no data	25	17.5	-
Total	143	100.0	100.0

Of those respondents for whom there are data, approximately one-third (38) are holding jobs within the category they aspired to and two-thirds (80) are holding jobs outside of the category they aspired to in 1948.

Educational and occupational satisfaction

Methodology of the third stage requires the operationalization of four additional concepts which will be discussed definitively. They are: occupational satisfaction, educational satisfaction, educational aspirations for first born child, and occupational aspirations for first born child.

Occupational satisfaction Occupational satisfaction is an attitudinal measure of feeling in 1967 in response to the question, "How satisfied are you with your present occupation". Respondents were requested to choose among five degrees of variation: very satisfied, satisfied, neutral, dissatisfied and very dissatisfied. Data on the question of occupational satisfaction are shown in Table 14.

able 14. Respondents' feelings of satisfaction toward their job

Feelings toward occupation	No.	%
very satisfied	68	47.6
satisfied	62	43.4
neutral	9	6.3
dissatisfied	3	2.1
No data	1	.7
Total	143	100.0

Educational satisfaction Educational satisfaction is measure of value operationalized by two questions. The irst, "If you could do it over again, would you go to ollege", has responses which are either positive or nega- ive. Data in Table 15 show the 1967 responses to this uestion.

able 15. Respondents' retrospective college desires

Retrospective college desires	No.	%
would go to college	114	79.7
would not go to college	25	17.5
don't know	3	2.1
no data	1	.7
Total	143	100.0

The second measure is the degree to which respondents value their high school education. The question, "What is your reaction to the statement, 'High school has been of great value to me'", has five degrees of agreement: strongly agree, agree, undecided, disagree, and strongly disagree. Data in Table 16 show the responses in 1967 to the statement that high school has been of great value.

Table 16. Respondents' responses to high school being of great value

Responses to value of high school	No.	%
strongly agree	81	56.6
agree	45	31.5
undecided	9	6.3
disagree	5	3.5
strongly disagree	1	.7
no data	2	1.4
Total	143	100.0

Respondents' educational satisfaction is determined by a cross analysis of data in Table 15 and 16. The relationship between how the respondents valued their high school education and whether or not they desired college in retrospect according to the level of education completed defines educational satisfaction for all respondents.

Satisfaction takes two forms. Those who completed no more than a high school education, were satisfied with it and would not go to college were they to do it over again are considered educationally satisfied. Those who had at least some post high school education and would go back if they were to do it over again despite their evaluation of high school also are educationally satisfied.

Educational dissatisfaction also may be defined in two ways according to level of high school completed. For those who completed high school only, dissatisfaction is operationalized as those who would go to college regardless of value placed on high school and those who would not go to college and were neutral or negative toward value of high school. For those who attended some post high school institution, those who would not attend if they were to do it over again despite their evaluation of high school are dissatisfied with their education. Data in Table 17 show the cross analysis of high school value and retrospective college desires according to level of education completed. The chi-square value of 18.385 is significant at the .001 level. The cross analysis provides a measure of educational satisfaction.

Of those who completed high school only, 68.8 percent are considered dissatisfied with their education and 31.2

Table 17. Cross analysis of high school value and retrospective college desires according to level of education completed

Retrospective college desires	College Action: post high school ed. No.	%	high school only No.	%	Total No.	%
would go again	61	98.4	53	68.8	114	82.0
would not go again	1	1.6	24	31.2	25	18.0
Subtotal	62	44.6	77	55.4	139	100.0
no data[a]	4	-	-	-	4	-
Total	66		77		143	

$\chi^2 = 18.385$, d.f. = 1 (.001 level = 10.827)

[a]Although the respondents' answer of "don't know" and the one missing datum are included as dissatisfied respondents in Table 8, they are not included in the chi-square computation in Table 18.

percent are satisfied. Of those who had at least some post high school education, 1.6 are dissatisfied and 98.4 percent are satisfied. Data in Table 18 indicate the respondents' educational satisfaction.

Table 18. Respondents' educational satisfaction

Educational satisfaction	No.	%
satisfied	85	59.4
dissatisfied	58	40.6
Total	143	100.0

Educational aspirations for first born child In the 1967 schedule, respondents were asked to identify the level of educational attainment they would like for their children. The levels of attainment were operationally defined as: grade school, high school, junior college, college or university, business school, vocational school and as much as they want. Data in Table 19 show the 1967 actual educational attainment of the respondents with their highest educational aspirations for their first born child.

The cross analysis does not meet the assumptions for a chi-square test but several observations may be noted: (1) those respondents who had only a high school education were the only ones who gave high school as their educational aspirations for their offspring, (2) the same respondents had a greater scattering of aspirations for their children along the range of possibilities listed, (3) respondents who had some post high school education almost invariable wanted college or university education for their first born child, and (4) those same respondents were not willing for the child to choose how much he or she wanted. The significance in data in Table 20 is that college intentions appear to be related to aspirations for offspring more so than educational attainment.

Table 19. Cross analysis of respondents' 1967 educational attainment by their highest aspirations for their first born child

Number of years educated	Educational aspirations for first born child															
	high school		junior college		college univ.		business school		voc. school		as much as wanted		no data		total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
high school only	3	2.1	7	4.9	60	42.3	6	4.2	1	.7	2	1.4	2	1.4	81	57.0
12-13 years			1	.7	14	9.9	1	.7					1	.7	17	12.0
13-14 years					11	7.7									11	7.7
14-15 years					6	4.2									6	4.2
15-16 years					12	8.5							1	.7	13	9.2
16-17 years					6	4.2							1	.7	7	4.9
17-18 years					3	2.1							1	.7	4	2.8
18-19 years					1	.7									1	.7
19-20 years					1	.7									1	.7
20 + years					1	.7									1	.7
Total	3	2.1	8	5.6	115	81.0	7	4.9	1	.7	2	1.4	6	4.2	142	100.0

Table 20. Cross analysis of respondents' educational aspirations for first born child by college intentions of 1948

Educational aspiration for first born child	College intentions							
	planned		did not plan		undecided		total	
	No.	%	No.	%	No.	%	No.	%
high school			3	2.1			3	2.1
junior college	1	.7	4	2.8	3	2.1	8	5.6
college, univ.	44	30.8	33	23.1	39	27.3	116	81.1
business school			4	2.8	3	2.1	7	4.9
voc. school					1	.7	1	.7
as much as wanted			2	1.4			2	1.4
no data	4	2.8	—	—	2	1.4	6	4.2
Total	49	34.3	46	32.2	48	33.6	143	100.0

Occupational aspirations for first born child This oncept is operationalized by responses to what occupations he respondents would like to see their son or daughter pur- ue upon completion of his (her) schooling. This study uses nly the first born child whether male or female. Although he schedule provides for both a first and second choice, nly data regarding first choice is used. Data in Table 1 indicate the first choice occupation to which respondents spire for their first born child.

able 21. First choice occupation to which respondents aspire for their first born child

ype of occupational aspiration	No.	%
rofessional, technical and kindred workers	78	54.5
armers, farm managers	4	2.8
anagers, officials, proprietors except farm	1	.7
lerical and kindred workers	2	1.4
ales workers	1	.7
raftsmen, foremen and kindred workers	2	1.4
ervice	5	3.5
ousewife	1	.7
heir own choice	18	12.6
on't know	11	7.7
o data	20	14.0
otal	143	100.0

Statistical Techniques

Four types of statistical tests were used in this study. The first test was an F test for group comparisons of means which was computed in a regression approach. This test was used to determine any significant differences of mean between educational congruence and incongruence in terms of: (1) North-Hatt scores for fathers' occupation, (2) number of years of parental education, and (3) four categories of occupational satisfaction. The second statistical test used was chi-square to examine the degree of association between the two variables involved. This test determined if any significant differences existed between educational congruence/incongruence and each of three subclassifications of that variable in terms of parental education treated as a classification variable. It also was used to determine association between educational congruence and incongruence in terms of discussion with parents, work outside high school, occupational congruence and educational satisfaction. Third, t tests were done to determine any significant differences of means between the three subclassifications of educational congruence in terms of: (1) North-Hatt scores for fathers' occupation, and (2) number of years of parental education. These t tests were calculated in an analysis of

variance framework. The final test used was a differences of proportion test to examine the degree of association between educational satisfaction and occupational satisfaction.

FINDINGS AND DISCUSSION

Findings

This section will present all of the hypotheses and the statistic testing each empirical hypothesis. A summary table of findings will be provided at the end of this section.

General Hypothesis I: Educational congruence is related to social factors in an individual's background.

Sub-hypothesis 1. The educationally congruent individuals will have parents with higher socioeconomic status than will educationally incongruent individuals.

E.H. 1: Those who have educational congruence will have parents with higher occupational prestige scores.

The calculated F value of .445 is not significant at the .05 level. The data do not support the hypothesis.

E.H. 2: Of the educationally congruent, those who planned to attend and did attend college will have parents with higher occupational prestige scores than those who neither planned to attend nor attended college.

The calculated t value of 1.87 is not significant at the .05 level. The hypothesis is not supported.

E.H. 3: Of the educationally incongruent, those who did not plan to attend college but did so will

have parents with higher prestige scores than those who planned to attend but did not attend college.

The calculated t value of -0.18 is not significant at the .05 level. The hypothesis is not supported.

E.H. 4: Of those who are undecided, those who attend college will have parents with higher prestige scores than those who do not attend.

The calculated t value of -0.65 is not significant at the .05 level. The hypothesis is not supported.

The lack of support for all four empirical hypotheses of Sub-Hypothesis 1 indicates that the prestige status of parents as measured by the North-Hatt scale, does not contribute significantly to educational congruence.

Sub-Hypothesis 2: The educationally congruent individuals will have parents with higher educational background than will the educationally incongruent.

E.H. 5: Those who have educational congruence will have parents who have more years of education than will those who are educationally incongruent.

The chi-square value of .838 is not significant at the .05 level. Using parental educational achievement as a continuous variable, the F value of .343 is not significant at the .05 level. The hypothesis is not supported.

E.H. 6: Of the educationally congruent, those who planned to attend college and did so will have parents with more years of education than will those who neither planned nor attended college.

The chi-square value of 11.911 is significant at the .01 level. Using parental educational achievement as a continuous variable, the t value of 3.07 also is significant at the .01 level. The hypothesis is supported.

E.H. 7: Of the educationally incongruent, those who did not plan to attend college but did so will have parents who have more years of education than will those who planned but did not attend college.

The chi-square value of .257 is not significant at the .05 level. Using parental educational achievement as a continuous variable, the t value of .40 also is not significant at the .05 level. The hypothesis is not supported.

E.H. 8: Of those who are undecided, those who attend college will have parents who have more years of education than will those who do not attend college.

The chi-square value of 6.40 is not significant at the .05 level. Using parental educational achievement as a continuous variable, the t value of .61 also is not significant at the .05 level. The hypothesis is not

supported.

One of the four empirical hypotheses of Sub-Hypothesis 2 was supported. The findings indicate that parental educational attainment contributes only to the differences within the educationally congruent group. That is, parental educational attainment is a significant factor between those who plan and attend post high school education and those who do not plan and do not attend. Other subcategories of educational congruence, namely, inconsistency between plans and action and indecision followed by positive or negative action, were not effected significantly by the educational attainment of respondents' parents.

Sub-Hypothesis 3: The educationally congruent individuals will seek advice concerning future plans from parents more often than will the educationally incongruent.

E.H. 9: Those who have educational congruence will have higher frequency of discussion of future plans with parents.

The chi-square value of 5.143 is not significant at the .05 level. Sub-Hypothesis 3 is not supported. There is no significant difference between educationally congruent and incongruent individuals on their advice-seeking patterns with parents concerning future plans.

Sub-Hypothesis 4: The educationally congruent individuals are more likely to have worked at jobs while in high school than those who are educationally incongruent.

E.H. 10: More of those who have educational congruence will have worked at jobs while in high school than will those who have educational incongruence.

The calculated chi-square value of .029 is not significant at the .05 level. The Sub-Hypothesis is not supported. Educational congruence is not significantly affected by working at jobs while in high school.

Only one of the attendant sub-hypotheses of General Hypothesis I is partially supported. Educational level of the parents is related to the difference between those who plan to attend and attend a post high school institution, and those who make no such plans and do not attend. All other social factors as indicated by Sub-hypotheses 1, 3 and 4 are not related to educational congruence/incongruence. The data show very little support for General Hypothesis I.

General Hypotheses II: Educational congruence is related to occupational congruence.

Sub-Hypothesis 5: The educationally congruent will more likely be occupationally congruent than those who are educationally incongruent.

E.H. 11: Those who have educational congruence will hold the type of job in 1967 that they aspired to in 1948.

The chi-square values of .079 for males and .041 for females are not significant at the .05 level. The hypothesis is not supported. Sub-Hypothesis 5 is not supported.

Sub-Hypothesis 6: If individuals who are undecided or incongruent in relation to education attend some post high school institution, they are more likely to be occupationally congruent than those who enter jobs without further education.

E.H. 12: Of those who are undecided or educationally incongruent, those who have had some formal training beyond high school will hold the type of job in 1967 that they aspired to in 1948.

The chi-square value of .039 is not significant at the .05 level. The hypothesis is not supported. Sub-Hypothesis 6 is not accepted.

General Hypothesis II is rejected. There is no significant relationship between educational congruence and occupational congruence.

General Hypothesis III: Occupational satisfaction is related to occupational and educational congruence.

Sub-Hypothesis 7: Occupational satisfaction will be greater for those individuals who show educational congruence than for those who are educationally incongruent.

E.H. 13: Those who have educational congruence will score higher in satisfaction with their present occupation.

The calculated chi-square value of 1.96 is not significant at the .05 level. The data do not support the hypothesis. Sub-Hypothesis 7 is not supported. Occupational satisfaction is not a significant factor in differences between those who are educationally congruent and those who are educationally incongruent.

Sub-Hypothesis 8: Individuals who are occupationally dissatisfied are more likely to have higher educational and occupational aspirations for their children than they are able to achieve for themselves, as compared to those who are occupationally satisfied.

E.H. 14: Those who have low scores in job satisfaction will have higher educational aspirations for their first born child than they were able to achieve.

The calculated chi-square value of 11.53 is not significant at the .05 level. The hypothesis is not supported.

E.H. 15: Those who have low scores in job satisfaction will have higher occupational aspirations for their first born child than they were able to achieve.

The calculated chi-square value of 45.652 is significant at the .05 level. The hypothesis is supported.

Sub-Hypothesis 8 is partially supported. Individuals who are occupationally dissatisfied are likely to have higher occupational aspirations for their children than they are able to achieve for themselves. However, occupational dissatisfaction does not engender correspondingly higher educational aspirations for their children.

General Hypothesis III is partially supported. Occupational satisfaction is related to occupational congruence. The data do not show any apparent relationship between occupational satisfaction and educational congruence.

General Hypothesis IV: Educational satisfaction is related to educational and occupational congruence.

Sub-Hypothesis 9: Individuals who are educationally congruent are more likely to be satisfied with their level of education.

E.H. 16: Those who have educational congruence will score higher in satisfaction with educational achievement.

The calculated chi-square value of 84.999 is significant at the .001 level. The hypothesis is supported. Sub-Hypothesis 9 is supported.

Sub-Hypothesis 10: Individuals who are occupationally congruent but educationally incongruent are more likely to be satisfied with their level of education than those who are educationally congruent and occupationally incongruent.

E.H. 17: Of those whose occupational and educational congruence are not consistent, those who have occupational congruence and educational incongruence will be more satisfied with their educational achievement.

The calculated chi-square value of .175 is not significant at the .05 level. The hypothesis is not supported. Sub-Hypothesis 10 is not supported.

Sub-Hypothesis 11: More individuals are educationally satisfied than are occupationally satisfied.

E.H. 18: The proportion of educationally satisfied respondents will be greater than the proportion of occupationally satisfied respondents.

The calculated Z value of 6.255 is not significant at the .05 level. The hypothesis is not supported. Sub-Hypothesis 11 is not supported.

General Hypothesis IV is supported by Sub-Hypothesis 9 but not by 10 and 11. A relationship exists between educational satisfaction and educational congruence.

Summary

General Hypothesis I was supported by one of the four sub-hypotheses. For those who are educationally congruent, parental education is higher for those that plan and attend post high school institutions than for those that do not plan nor attend.

General Hypothesis II was not supported. General Hypothesis III was supported by one of two sub-hypotheses. Occupational dissatisfaction is related to higher occupational aspirations for their offspring than the dissatisfied persons were able to achieve.

General Hypothesis IV was supported by one of three sub-hypotheses. Educational satisfaction is related to educational congruence.

Discussion

The question of which people are educated beyond high school had been one of the questions of this study. Based on the studies done on occupational congruency, it was hypothesized that the social background of individuals might contribute to educational congruence more so than their contribution to occupational congruence. Reasoning for this was attributed to the developing values of young people within their reference groups, in preparation for the first major decision. The primary action in relation to these values was post high school education which is an increasing prerequisite by society for occupational entry.

The four sub-hypotheses identified the four social background factors as: (1) occupational prestige status of respondents' parents, (2) education of parents, (3) advice-seeking patterns of respondents, and (4) work experience while in high school.

Occupational prestige status of parents had no relation to those who were consistent or inconsistent between educational plans and action. The idea that parents of high occupational prestige can better afford to send their children to school beyond the 12th grade and do so is not supported in this study. Apparently, the decision about post high school education is independent of the parents station in life

and is based on more personal reasons of the decision-maker.

The significance of parental education lends support to the idea that people of similar backgrounds tend to have similar outcomes. Those who planned to obtain education beyond high school and did so had parents with more years of education than those who did not plan and did not attend. Both groups fall within the definition of educational congruence as defined in this thesis. However, parental education did not distinguish the educationally congruent from the incongruent or undecided respondents.

Whether or not the young people discuss their future plans with their parents was not related to whether they followed through with those plans. Frequency of these discussions also had no bearing on the actions taken by those who were undecided about their educational plans.

Although one half of the respondents worked at jobs while in high school, it did not seem to be of significance in their first major decision about post high school education. Examining the jobs that the students had, few of them would acquaint young people with vocational opportunities for the future. As compared to meaningful and significant work experiences, they were routine and casual (Slocum, 1966: 222). Except for farm work and service work, skills and information about occupational categories to which they might

aspire were probably not a condition of this part-time job.

Perhaps most important to this study is the outcome of General Hypothesis II. Although the relationship between educational plans and action (congruence) are highly significant and the relationship between occupational aspirations and achievement (congruence) are also significant, the two concepts, educational congruence and occupational congruence are not related. Several reasons may account for this: (1) the two concepts are separated by an intervening variable; or (2) two different value systems are activated which cause a parallel outcome on each but has insufficient cause to be related in the minds of people generally. The latter reasoning is being responded to by the vocational efforts going on in the state presently such as development of vocational area schools and demand for vocational counselors. It also is supported by published statistics showing the rise of personal income as a result of increasing educational levels.

The two value systems which were referred to several times in the theoretical chapter of this thesis might be identified as (1) personal reward such as self-fulfillment, self-satisfaction or intellectual stimulation; and (2) monetary or social reward found in income or occupational prestige. The possibility that the dichotomy between personal reward and social reward is the intervening variable which separates

educational congruence from occupational congruence cannot be denied.

Hypothesis III and IV are both partially supported in ways that increase the possibility of the dichotomy. Educational congruence is related to educational satisfaction and occupational congruence is related to occupational satisfactions. Further relationship between the four variables does not exist. Thus, when young people plan on a post high school education and act on those plans, the reward satisfaction is different from the reward satisfaction when they aspire to an occupation and achieve it.

Given this dichotomy between the rewards of educational congruence and the rewards of occupational congruence, the outcome of Sub-Hypothesis 11 suggests that social rewards are more common or more important than personal rewards. The individual in our society is free to choose not to educate himself beyond high school. He is not free, if he is to be classified as normal, to choose not to work at some gainful occupation.

Chris Argyris (1957, 1964), among others has given thought to the needs for personal rewards in occupations within an organizational structure. His emphasis is similar to the personal rewards seen in the consumptive component of education.

Schools in the country are attempting to incorporate

first hand learning about modern occupations into the daily routine of class curricula. They respond to the productive components. Although both approaches respond to the personal and social reward needs of individuals, the results of this study suggest that educational and occupational congruence does not reduce the dichotomy between them.

The fact that occupational dissatisfaction is related to higher occupational aspirations for the first born child is in support of studies done by J. E. Dunkelberger and Ely Chinoy (Slocum, 1966: 195). Although respondents' educational aspiration for their offspring is not related to their present educational attainments, it is related to their own 1948 post high school plans despite the fact that only about one half of them acted on those plans. In this way, present occupational dissatisfaction and past educational plans of the respondents are related to the future occupational and educational aspirations for their children. This relationship supports the waning viability of the respondents' own goals and the displacement of these goals to their children.

Table 22. Summary of findings for empirical hypotheses

	Statistic used	Calculated score	d.f.	Level of significance
Educational congruence & background social factors				
E.H. 1	F test	$F = .552$	1, 140	$F.05 = 3.91$
E.H. 2	t test	$t = 1.87$	80	$t.05 = 1.98$
E.H. 3	t test	$t = -.18$	11	$t.05 = 2.20$
E.H. 4	t test	$t = -.65$	46	$t.05 = 2.01$
E.H. 5	chi-square & F test	$\chi^2 = 1.149$ $F = .180$	3 1, 140	$\chi^2.05 = 7.81$ $F.05 = 3.91$
E.H. 6	chi-square & t test	$\chi^2 = 11.91^*$ $t = 3.07^*$	3 80	$\chi^2.01 = 11.34$ $t.05 = 1.98$
E.H. 7	chi-square & t test	$\chi^2 = .257$ $t = .40$	2 11	$\chi^2.05 = 5.99$ $t.05 = 2.20$
E.H. 8	chi-square & t test	$\chi^2 = 6.40$ $t = .61$	3 46	$\chi^2.05 = 7.81$ $t.05 = 2.01$
E.H. 9	chi-square	$\chi^2 = 5.143$	2	$\chi^2.05 = 5.99$
E.H. 10	chi-square	$\chi^2 = .029$	1	$\chi^2_{.05} = 3.84$

*Significant at the .05 level.

Table 22 (Continued)

	Statistic used	Calculated score	d.f.	Level of significance
Educational and occupational congruence				
E.H. 11	chi-square	$\chi^2_2 = .079$	1	$\chi^2_2.05 = 3.84$
	chi-square	$\chi^2 = .041$	1	$\chi^2.05 = 3.84$
E.H. 12	chi-square	$\chi^2 = .039$	1	$\chi^2.05 = 3.84$
E.H. 13	F test	$F = 1.469$	1,140	$F.05 = 3.91$
E.H. 14	chi-square	$\chi^2 = 11.532$	21	$\chi^2.05 = 37.65$
E.H. 15	chi-square	$\chi^2 = 45.652^*$	30	$\chi^2.05 = 43.77$
E.H. 16	chi-square	$\chi^2 = 84.999^{**}$	5	$\chi^2.001 = 2.517$
E.H. 17	chi-square	$\chi^2 = .175$	1	$\chi^2.05 = 3.84$
E.H. 18	difference of proportion	$z = 6.25$	-	$z.05 = 1.64$

**Significant at the .001 level.

SUMMARY AND CONCLUSIONS

The specific objectives of this study were: (1) to examine social background factors which may be related to educational congruence, (2) to examine the relationship between educational congruence and occupational congruence, (3) to examine educational and occupational congruence as it relates to occupational satisfaction, and (4) to examine educational and occupational congruence as it relates to educational satisfaction.

The data were obtained from a longitudinal study of 143 high school seniors from eight rural high schools in Hamilton County and Story City, Iowa. The present thesis utilized data from the original study completed in 1948 and a follow-up study in 1967.

This thesis drew upon past research in occupational career decision-making to formulate a theoretical approach in three stages. The attempt was to relate educational congruence to social background factors in the first stage. Educational congruence in the second stage was hypothesized as a personal intervening variable indicating maturity in the relationship between the same social background factors and occupational congruence. Educational congruence was hypothesized as contributing to both educational and occupational satisfaction over a span of 19 years. There were four major hypotheses

examined, none of which were fully supported.

The expected relationship between educational congruence and social background was supported only in the case of the factor concerning parental education. This factor was not related to educational incongruence which, in this case, included those repondents who were undecided in the initial survey. Three fifths (57 percent) of the sample were educationally congruent.

Although educational congruence was not related to occupational congruence, educational congruence was related to educational satisfaction and occupational congruence to occupational satisfaction. This suggests that mature decisions that are acted upon are more likely to lead to satisfaction. However, generalization of the effect of one congruence measure did not carry over to the outcomes of the other.

Within the second stage of the theory, the data show that educational congruence does not contribute significantly to the compromise of personal goals with occupational goals. Of the 143 respondents, 59 percent were satisfied with their educational achievement level and 91 percent were satisfied with their occupational achievement. The evidence suggests that this compromise does not occur during the school years. Personal involvement in whatever occupation they may be working could provide the conditions for some

compromise between personal goals and occupational goals. Upward mobility for some and a downward revision of aspirations may account for others. For those who were dissatisfied with their job, a desire for higher occupational status-level for their offspring than they were able to achieve, is consistent with the literature. The long-range outcomes of educational and occupational congruence are separate but parallel rewards.

In conclusion, two generalizations about education's relationship to occupation are tentatively submitted: (1) Society has placed too much faith in the specific contribution of formal education to occupational competence, or (2) post high school education has not made the knowledge it imparts useful to students by whom both occupational and personal satisfaction is sought.

Suggestions

There were several suggestions that would have enhanced the present study. A major weakness was the small sample size which did not allow examination of subcategories for both the dependent and independent variables. A larger "N" could facilitate examination of the incongruent and the undecided groups' educational outcomes in relation to subcategories of independent variables.

The population from which this study was drawn limits conclusions to this specific group. Sampling from a larger

population including rural, nonrural and urban representation would allow the researcher to make conclusions about a much larger group.

Despite the value of data encompassing 19 years, the fact that the last follow-up study was taken five years ago limits the applicability of this data to present circumstances. Of course, as previously stated, information about one generation cannot be applied directly to the next generation without considering changes in the social and educational environment, as well as changed in ideals and aspirations of young people in the interim.

With the rapidly changing occupational opportunities and the need for young people to anticipate future changes, satisfaction of the individual is a relevant variable in the health of a nation, a state or an individual. Further research might seek to develop questionnaires that tap this indicator in more depth. Although the schedules for this study directly questioned the respondent regarding occupational satisfaction, indirect determination of educational satisfaction may well have modified the results of a more direct approach.

With young people proclaiming their "maturity" at earlier ages, it would be advantageous to society if researchers were to examine the variables of social maturity more closely. Incongruence and indecision were assumed to

indicate immaturity in this study. It seems likely that formal education could contribute to mature educational and occupational decision-making given some information about it's nature. The era of the Horatio Alger myth is rapidly coming to a close.

BIBLIOGRAPHY

Argyris, Chris
1957 Personality and Organization. New York: Harper and Row.

Argyris, Chris
1964 Integrating the Individual and the Organization. New York: John Wiley & Sons, Inc.

Bauder, Ward W. and Lee G. Burchinal
1965 Farm Migrants to the City: A Comparison of the Status, Achievement, Community and Family Relations of Farm Migrants with Urban Migrants and Urban Natives in Des Moines, Iowa. Iowa Agricultural and Home Economics Experiment Station Bulletin 534.

Berkey, Ann and J. Allan Beegle
1966 Farm-Nonfarm Differences in Educational Attainment, Michigan 1960. Quarterly Bulletin of the Michigan Agricultural Experiment Station 48 (February). East Lansing: Michigan State University.

Blau, Peter M., John W. Gustad, Richard Jesser, Herbert S. Parnes and Richard C. Wilcock
1956 "Occupational choice: a conceptual framework." Industrial and Labor Relations Review 9 (July): 531-543.

Blau, Peter M. and Otis Dudley Duncan
1967 The American Occupational Structure. New York: John Wiley & Sons, Inc.

Bohlen, Joe M.
1948 Factors Related to Migration Intentions of High School Seniors, Hamilton County, Iowa, 1948. Unpublished M.S. thesis. Ames: Iowa State University.

Bohlen, Joe M. and Dean R. Yoesting
1968 "Congruency between occupational aspirations and attainments of Iowa young people." Rural Sociology 33 (June): 207-213.

Bordua, David J.
1960 "Educational aspirations and parental stress on college." Social Forces 38 (March): 262-269.

Brookover, W. B., E. L. Erickson and L. M. Joiner
1967 "Educational aspirations and educational plans in relation to academic achievement and socioeconomic status." The School Review 75 (winter): 392-400.

Burchinal, Lee G.
1961 "Differences in educational and occupational aspirations of farm, small-town, and city boys." Rural Sociology 26 (June): 107-121.

Burchinal, Lee G.
1962 Career Choices of Rural Youth in a Changing Society. Minnesota Agricultural Experiment Station Bulletin 458.

Burchinal, Lee G.
1965 Rural Youth in Crisis: Facts, Myths, and Social Change. Washington D.C.: U.S. Department of Health, Education, and Welfare.

Caplow, Theodore
1954 The Sociology of Work. New York: McGraw-Hill Book Company.

Case, Herman M.
1956 "College as a factor in occupational choice: a study of different perceptions by farm and non-farm youth." Journal of Educational Sociology 30 (December): 191-199.

Cooley, Charles H.
1916 Social Organization. New York: C. Scribner's Sons.

Darley, John C.
1962 Promise and Performance: A Study of Ability and Achievement in Higher Education. Berkeley: University of California.

Dole, A. A.
1964 "Reported determinants of educational choice." Personnel and Guidance Journal 42 (February): 564-571.

Edwards, Alba M.
1934 Comparative Occupation Statistics for the United States. Washington, D.C.: United States Government Printing Office.

Ginzberg, Eli and others
1951 Occupational Choice: An Approach to General Theory. New York: Columbia University Press.

Haller, A. O.
1960 "The occupational achievement process of farm-reared youth in urban-industrial society." Rural Sociology 25: 321-333.

Haller, A. O.
1969 Rural Education and the Educational and Occupational Attainments of Youth. Educational Resources Information Center, Clearinghouse on Rural Education and Small Schools. Las Cruces, New Mexico State University.

Haller, A. O. and I. W. Miller
1963 The Occupational Aspiration Scale: Theory, Structure and Correlates. Michigan Agricultural Experiment Station Technical Bulletin 288.

Haller, A. O. and William H. Sewell
1967 "Occupational choices of Wisconsin farm boys." Rural Sociology 32 (March): 37-55.

Harp, John and Mildred Morton
1966 Factors Associated with the College Attendance of College Youth. U.S. Department of Health, Education, and Welfare, Office of Education, Bureau of Research, Project 348.

Hatt, Paul K. and C. C. North
1947 "Jobs and occupations." Opinion News (September): 3-13.

Hildahl, Spencer H.
1961 A Longitudinal Analysis of Migration of Young Adults, Hamilton County, Iowa. Unpublished M.S. thesis. Ames: Iowa State University.

Hodges, Linda F.
1970 A Longitudinal Study of the Social Mobility of Rural Youth. Unpublished M.S. thesis. Ames: Iowa State University.

Hyman, Herbert H.
1953 "The value systems of different classes." Pp. 426-442 in Bendix, Reinhard and Seymour Martin Lipset (eds.), Class, Status and Power. Glencoe, Illinois: The Free Press.

Iowa State Department of Public Instruction
1970 Data on Iowa Schools, School Year 1968-69. Des Moines, Iowa: The State of Iowa.

Jehlik, Paul J. and Ray E. Wakeley
1949 Rural Organization in Process: A Case Study of Hamilton County, Iowa. Iowa Agriculture Experiment Station Research Bulletin 365.

Katz, Daniel and Robert L. Kahn
1966 The Social Psychology of Organizations. New York: Wiley.

Kohout, Vernon A. and John W. M. Rothney
1964 "A longitudinal study of consistency of vocational preferences." American Educational Research Journal 1 (January): 10-21.

Krauss, Irving
1964 "Sources of educational aspiration among working class youth." American Sociological Review 29: 867-879.

Kuvlesky, William P. and Robert C. Bealer
1966 "A clarification of the concept 'occupational choice'." Rural Sociology 31 (September): 265-276.

Kuvlesky, William P. and Robert C. Bealer
1967 "The relevance of adolescents' occupational aspirations for subsequent job attainments." Rural Sociology 32, 3: 290-301.

Kuvlesky, William P. and Nelson L. Jacob
1968 Educational Status Projections of Rural Youth: Annotations of the Research Literature. Texas A and M University: Department of Agricultural Economics and Sociology.

Lindstrom, D. E.
1964 "Educational and vocational needs of rural youth: A pilot study. Illinois Agricultural Economics, 4 (July): 11-17.

Lindstrom, D. E.
1968 Factors Affecting Post-High School Educational and Job Plans of Rural Youth. Illinois Agricultural Experiment Station Bulletin 731.

Lipset, Seymour M. and Reinhard Bendix
1959 Social Mobility in Industrial Society. Berkeley and Los Angeles: University of California Press.

Little, J. Kenneth
1958 A State-Wide Inquiry into Decisions of Youth About Education Beyond High School. School of Education, University of Wisconsin (September).

Merton, Robert
1957 Social Theory and Social Structure. New York: The Free Press.

Middleton, Russell and Charles M. Grigg
1959 "Rural-urban differences in aspiration." Rural Sociology 24 (December): 347-354.

Miller, Delbert and W. H. Form
1951 Industrial Sociology. New York: Harper and Bros.

Miller, Jerry L. L.
1960 "Occupational choice and the educational system." Journal of Educational Sociology 34 (November): 117-126.

Nam, Charles B. and James D. Cowhig
1962 Factors Related to College Attendance of Farm and Non-farm High School Graduates: 1960. U.S. Bureau of Census Series ERS (P-27), number 32.

Nelson, Joel I.
1971 Educational Aspirations in Minnesota: Rural-Urban Comparisons. Minnesota Agricultural Experiment Station Bulletin 502.

Parsons, Talcott
1951 The Social System. Glencoe, Illinois: The Free Press.

Porter, R. J.
1954 "Predicting vocational plans of high school senior boys." Personnel and Guidance Journal 33 (December): 215-218.

Reiss, Albert, O. D. Duncan, Paul K. Hatt and C. C. North
1961 Occupations and Social Status. Glencoe, Illinois: The Free Press.

Rosenberg, Morris
1957 Occupations and Values. Glencoe, Illinois: The Free Press.

Schultz, Theodore W.
1963 The Economic Value of Education. New York: Columbia University Press.

Schwarzweller, Harry K.
1959 "Value orientations in educational and occupational choices." Rural Sociology 24: 246-256.

Sewell, W. H., A. O. Haller and Alejandro Portes
1969 "The educational and early occupational attainment process." American Sociological Review 34 (February) 82-92.

Sewell, William H., A. O. Haller and M. A. Straus
1957 "Social status and educational and occupational aspiration." American Sociological Review 22 (February): 67-73.

Sewell, William H., D. G. Marshall, A. O. Haller and W. A. DeHart
1953 "Factors associated with attitude toward high-school education in rural Wisconsin." Rural Sociology 18 (December): 359-365.

Sewell, William H. and Alan M. Orenstein
1965 "Community of residence and occupational choice." American Journal of Sociology 70 (March): 551-563.

Sewell, William H. and Vimal P. Shah
1968 "Social class, parental encouragement and educational aspirations." American Journal of Sociology 73 (March): 559-572.

Sherif, Muzafer and Carolyn W. Sherif
1964 Reference Groups: Exploration into Conformity and Deviation of Adolescents. New York: Harper and Row.

Siemans, L. B. and J. E. W. Jackson
1965 Educational Plans and their Fulfillment: A Study of Selected High School Students in Manitoba. Manitoba Faculty of Agriculture and Home Economics 2 (September).

Simon, Kenneth A. and W. Vance Grant
1967 Digest of Educational Statistics 1967. Washington, D.C.: U.S. Department of Health, Education and Welfare.

Slocum, W. L.
1958 "Educational planning by high school seniors." Journal of Educational Research 51 (April): 583-590.

Slocum, W. L.
1959 "Some sociological aspects of occupational choice." American Journal of Economy and Sociology 18 (January): 139-147.

Slocum, W. L.
1966 Occupational Careers. Chicago: Aldine Publishing Company.

Slocum, W. L.
1967 "The influences of reference group values on educational aspirations of rural high school students." Rural Sociology 32 (September): 269-277.

Snedecor, George W. and William G. Cochran
1967 Statistical Methods. Ames, Iowa: The Iowa State University Press.

Super, Donald E.
1953 "A theory of vocational development." The American Psychologist 8 (May): 185-190.

Walker, Helen M. and Joseph Lev
1969 Elementary Statistical Methods. New York: Holt, Rinehart and Winston, Inc.

Youmans, E. C., S. E. Grigsby and H. C. King
1965 After High School What? Gainesville: University of Florida, Cooperative Extension Service.

Wolfle, Dael L.
1954 America's Resources of Specialized Talent. New York: Harper.

Youmans, E. C., S. E. Grigsby and H. C. King
1965 After High School What? Gainesville: University of Florida, Cooperative Extension Service.

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